

**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757110012-6**

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**CIA-RDP86-00513R001757110012-6"**

TSINZERLING, Ye.V.

Zonary structure twinning of quartz. Dokl.AN SSSR 94 no.6:1079-  
1080 F '54. (MLRA 7:2)

1. Institut kirstallografii Akademii nauk SSSR,  
(Quartz) (Crystallography)

Artificial stabilization of the structure of quartz. U.S.S.R.  
Teinzerling. *Doklady Akad. Nauk S.S.S.R.* 95: 29-30  
(1954); cf. Teinzerling, *ibid.* 57, 387 (1947); 90, 782 (1953);  
C.A. 44, 25944. -- Previous expts. had demonstrated that  
Dauphiné twinning lamellae in quartz can be removed by  
heating the crystals in an elec. field ("electrolytic purify-  
ing"). The stabilization of the monocryst. quartz is so  
much increased that it completely loses its ability to form  
twins under mech. actions, e.g. torsion. This elec. method  
is even suitable for crystals which are only difficultly changed  
by ordinary methods in their twinning characteristics, e.g.  
by heating and cooling, or under torsion. The Dauphiné  
twin lamellae are easily detected in quartz by etching pol-  
ished sections of rhombohedral orientation with HF. The  
plastic behavior of the purified crystals is much inferior to  
that of the crystals not electrically treated. This observa-  
tion is in unexplained contradiction to the previously ob-  
served fact that particularly pure natural quartz crystals  
are much more plastic than those in the contaminated state.  
W. Eitel



TSINZERLING, Ye.V.

Stabilization of quartz lattices having sonary structures. Dokl.  
AN SSSR 95 no.4:801-803 Ap '54. (MLRA 7:3)

1. Institut kristallografii Akademii nauk SSSR.  
(Quartz) (Crystallography)

ACCESSION NR: AP4043193

S/0070/64/009/004/0565/0567

AUTHORS: Tsinzerling, Ye. V.; Mironova, Z. A.

TITLE: Display of dislocations in quartz by etching in an autoclave

SOURCE: Kristallografiya, v. 9, no. 4, 1964, 565-567

TOPIC TAGS: quartz crystal, etched crystal, dislocation net, crystal growth

ABSTRACT: It has been found that etching in an autoclave can show up dislocations even on a cut surface of synthetic quartz. Etch figures of dislocation loops were observed on natural and synthetic quartz by the following method: The autoclave was filled 40--50% with a solution saturated with sodium carbonate or a mixture of the latter and alkali or borax, and the pressure was varied between 40 and 140 atm. The temperature was varied between 200 and 350°C. The experiment lasted 1.5--3 hours. Etching in a saturated solution of

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ACCESSION NR: AP4043193

sodium carbonate yields small but sufficiently clear etch pits. A mixture of equal parts of an  $\text{NaCO}_3$  solution and a borax solution gives rise to a film which cannot be removed and prevents a clear view of the etch pits. Etching with a 5% solution of  $\text{NaCO}_3$  and a 1% solution of  $\text{NaOH}$  does not yield sharply defined etch pits on all types of quartz. Two halves of the same cut, one etched by the method described above and the other by the usual method with a selective etchant ( $\text{HF}$  with  $\text{H}_3\text{BO}_3$ ) at room temperature and atmospheric pressure, exhibited etch figures that were mirror images of each other. This indicates that they are due to a dislocation. Orig. art. has: 2 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography, AN SSSR)

SUBMITTED: 09Mar64

SUB CODE: SS

NR REF SOV: 001

ENCL: 00

OTHER: 005

Card 2/2

TSINZERLING, Ye.V.

Twinning of quartz by twist deformation. Trudy Inst.krist.no.11:  
165-171 '55.  
(Quartz) (Dislocations in crystals) (MLRA 9:6)

*Tsinzerling, Ye. V.*

USSR/Solid State Physics - Mechanical Properties of Crystals  
and Polycrystalline Compounds.

E-10

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11934  
Author : Tsinzerling, Ye. V., Perekalina, Z. B.  
Inst :  
Title : Strength of Quartz in Twisting.  
Orig Pub : Tr. In-ta kristallogr. AN SSSR, 1955, vyp. 11, 172-176  
Abstract : No abstract.

Card 1/1

Category : USSR/Solid State Physics - Morphology of Crystals.  
Crystallization

E-7

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6719  
Author : Tsinzerling, Ye. V.  
Title : On the Twinning of Quartz with Zonal and Sectorial Structure  
by Means of the Transformation Method  
Orig Pub : Tr. in-ta kristallogr. AN SSSR, 1956, vyp. 12, 141-143

Abstract : The irregularities in the internal structure of a quartz  
having a zonal or sectorial coloring exert a retarding ef-  
fect on the twinning by  $\alpha \rightleftharpoons \beta$  transformation. The twins are  
nucleated and grow first in the bright regions that have the  
least impurities. The lines of separation of the dif-  
ferently colored regions are barriers for the twins, and to  
overcome these barriers it is necessary to have an addition-  
al expenditure of energy. A regular distribution of twins,  
encompassing the contorted sections, is reached by  
multiple repetition of the  $\alpha \rightleftharpoons \beta$  transformation.

Card : 1/1



*TSINZERLING Ye.V.*  
FAVORSKAYA, M.A.; TSINZERLING, Ye.V.

Metamorphism of quartz from an ore vein on contact with a porphyrite dike. Zap. Vses. min. ob-va 86 no.4:488-495 '57. (MIRA 11:1)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii i Institut kristallografii AN SSSR, Moskva.  
(Rocks, Crystalline and metamorphic)

TSINZERLING, Ye.V.; MIRONOVA, Z.A.

Exposure of dislocations in quartz by the auroclave etching method. Kristallografiia 9 no.4:565-567 J1-Ag '64.

1. Institut kristallografii AN SSSR.

(MIRA 17:11)

TSINZERLING, Ye.V.; VOL'SKAYA, O.B.

Determining the sign of rotation of the polarization plane in  
quartz from the etching figures on the base. Kristallografiia  
10 no.1:116-118 Ja-F '65. (MIRA 18:3)

1. Institut kristallografii AN SSSR.

TSINZERLING, Ye.V.

Elongated cavities in quartz. Zap. Vses. min. ot-ya 93 no.3:  
342-348 '64. (MIRA 18:3)

TSINZERLING, Ya.V.

Silver dendrites produced on quartz in an electric field.  
Kristallografiia 10 no.3:368-370 My-Je '65.

(MIRA 18:7)

1. Institut kristallografi AN SSSR.

TSINZERLING, Ye.V.; MIRONOVA, Z.A.

Disclosure of dislocations in quartz by the method of selective etching. Kristallografiia 8 no.1:117-120 Ja~F'63

(MIRA 17:7)

1. Institut kristallografii AN SSSR.

TSINZERLING, Ye.V.

Effect of Li, Na, Ge, Al impurities on twinning in synthetic quartz. Kristallografiia 9 no.1:69-73 Ja-F '64. (MIRA 17:3)

1. Institut kristallografii AN SSSR.

ACCESSION NR: APh012276

S/0070/64/009/001/0069/0073

AUTHOR: Tsinzerling, Ye. V.

TITLE: The effect of Li, Na, Ge, and Al impurities on twinning in synthetic quartz

SOURCE: Kristallografiya, v. 9, no. 1, 1964, 69-73

TOPIC TAGS: impurity, Li, Na, Ge, Al, twinning, quartz, synthetic quartz, artificial quartz, structural impurity, isomorphous replacement, impurity injection

ABSTRACT: The author's previous work indicates that twinning in quartz is due to internal morphology, but it has not been clear what impurities might affect this twinning, how much impurity will enter the quartz structure, in what state the impurity may be injected, or what structural changes may hinder the twinning of injected quartz. The purpose of the present study was to shed light on this problem. Na and Li are not structural impurities, because their ions occupy structural holes. These experiments have shown that the presence of Na and Li ions in quartz, in either alpha or beta modifications, does not interfere with the twinning pattern, whether the ions are introduced during growth of the crystal or are injected into fully developed crystals. Ge and Al, on the other hand, are structural impurities,

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ACCESSION NR: AP4012276

since they isomorphously replace Si in the silica tetrahedrons of the quartz lattice. The two elements are differently incorporated by the different pyramids of growth. Crystals with the smallest amount of Ge twin easily, according to a definite pattern. Crystals with the largest amounts of Ge show no clear pattern of twinning, and some specimens twin only with difficulty. Twinning in association with Al depends markedly on the orientation of growth of the crystal. For crystals grown along (0001) the Al occupies structural holes, and thus changes only the lattice parameter  $a$ . Plates of these crystals twin according to a definite pattern, regardless of the amount of  $Al_2O_3$ . But crystals grown along the rhombohedral pyramid exhibit much greater sensitivity to the quantity of  $Al_2O_3$ . With small amounts of the impurity, twinning occurs easily, ignoring the faces of the seed crystal. But with amounts of 0.07-0.08%  $Al_2O_3$  the plates remain monocrystalline. "In conclusion I express my thanks to V. P. Butuzov and L. I. Tsinober for preparing the synthetic quartz crystals, to O. B. Vol'skaya and L. A. Solomentsevaya for taking the photographs, to L. G. Chentsovaya for her interest in the work, and to V. A. Frank-Kamenetskiy and I. Ye. Kamentsev for providing data on measurements of lattice parameters of the quartz samples I investigated." Orig. art. has: 7 figures.

Card 2/3

ACCESSION NR: AP4012276

ASSOCIATION: Institut kristallografi AN SSSR (Institute of Crystallography  
AN SSSR)

SUBMITTED: 26Jun63

DATE ACQ: 19Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 008

OTHER: 006

Card 3/3

2

S/070/63/008/001/022/024  
E132/E460

AUTHORS: Tsinzerling, Ye.V., Mironova, Z.A.

TITLE: Revealing dislocations in quartz by the method of selective etching

PERIODICAL: Kristallografiya, v.8, no.1, 1963, 117-120

TEXT: The usual etch for quartz, known since 1855, is HF generated by  $\text{CaF}_2$  and sulphuric acid. Solutions of sodium or potassium carbonates at 125 to 150°C also etch slowly. Other etches, potassium sulphate with KF, metaphosphoric acid with NaOH, borax, potassium and magnesium carbonates etc, are known and have various etching characteristics. Attempts have now been made to reduce the activity of HF to make a selective etch. Two successful mixtures were: (1) 40% HF in water (time of etching 2 to 3 hours) and (2) the same mixture with boric acid in the ratio of 10:1 (time of etching 3 to 20 hours). The activity can be further decreased by using equal parts of the two acids. The points of emergence of dislocations can be detected as large etch pits on a background of smaller pits. Etch pits connected with deformation and with the  $\alpha$ - $\beta$  transformation were also found. There are 4 figures.

Card 1/2

Revealing dislocations ...

S/070/63/008/001/022/024  
E132/E460

ASSOCIATION: Institut kristallografii AN SSSR  
(Institute of Crystallography AS USSR)

SUBMITTED: May 3, 1962

✓

Card 2/2

TSINZERLING, Ye.V.; URUSOVSKAYA, A.A.; GOVORKOV, V.G.

Is it possible to obtain artificial Japanese twins of quartz?  
Zap.Vses.min.ob-va 90 no.5:567-571 '61. (MIRA 14:10)

1. Institut Kristallografii AN SSSR, Moskva.  
(Quartz)

PHASE I BOOK EXPLOITATION

SOV/5602

Tsinzerling, Yekaterina Vladimirovna

Iskusstvennoye dvoynikovaniye kvartsa (Artificial Twinning in Quartz) Moscow,  
Izd-vo AN SSSR, 1961. 159 p. Errata slip inserted. 1,800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut kristallografii.

Resp. Ed.: M. P. Shaskol'skaya; Ed. of Publishing House: Ye. B. Kuznetsova;  
Tech. Ed.: Ye. V. Makuni.

PURPOSE: This book is intended for physicists, mineralogists, crystallographers,  
petrographers, and specialists in quartz growing.

COVERAGE: The author describes the morphology of quartz and its physical and  
mechanical properties. He analyzes in detail the methods and processes of  
quartz twinning and detwinning, and the possibilities of using the twin  
crystals for transformation into piezoquartz. No personalities are mentioned.  
There are 293 references: 95 Soviet, 96 English, 79 German, and 23 French.

Card ~~1/5~~

TSINZERLING, Yekaterina Vladimirovna; SHASKOL'SKAYA, M.P., otv. red.;  
KUZNETSOVA, Ye.B., red. izd-va; MAKUNI, Ye.V., tekhn. red.

[Artificial twinning of quartz] Iskusstvennoe dvoynikovanie  
kvartsa. Moskva, Izd-vo Akad. nauk SSSR, 1961. 159 p.  
(MIRA 14:5)

(Quartz)

✓  
TSINZERLING, <sup>Xe.</sup> E.V., Doc Geol-Mineralogical Sci--(diss) "Morpho-  
logical study of artificial <sup>(twinning of)</sup> ~~and~~ quartz under the effect of various  
factors." Moscow. [Publishing House of the Acad Sci USSR], 1958.  
35 pp, with <sup>all.</sup> ~~22 pp~~, (Acad Sci USSR, Inst of Crystallography). 225 co-  
pies. ~~See~~ List of author's works, pp 32-34 (30 titles).  
(KL, 38-58, 105).

10



TSIOKOVSKIY, Konstantin Eduardovich; BLAGONRAVOV, A.A., akademik,  
otv. red.; VOROB'YEV, B.N., red.; PROKOP'YEVA, N.B.,  
red. izd-va; YEGOROVA, N.F., tekhn. red.

[Rocket into outer space; investigation of outer space with  
jet-propelled devices] Raketa v kosmicheskoe prostranstvo;  
issledovanie mirovykh prostranstv reaktivnymi priborami. Mo-  
skva, Izd-vo AN SSSR, 1963. 110 p. (MIRA 16:6)  
(Outer space--Exploration)(Rockets (Aeronautics))  
(TSiolkovskii, Konstantin Eduardovich, 1857-1935)

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TSIOLKOVSKI, K. E.

~~DECEASED~~ 1935

*Airships, etc.*

SEE ILC

TSIOLKOVSKIY, K.E.; VOROB'YEV, B.N., inzh.; SOKOL'SKIY, V.N.;  
KOSMODEM'YANSKIY, A.A., doktor fiz.-mat. nauk, otv. red.;  
KUDRYAVTSEVA, L.V., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Jet aircraft] Reaktivnye letatel'nye apparaty. Moskva, Izd-  
vo "Nauka," 1964. 473 p. (MIRA 17:3)

TSIOLKOVSKIY, Konstantin Eduardovich; VOROB'YEV, B.N., red.

[Life in the interstellar environment] Zhizn' v mezh-  
zvezdnoi srede. Moskva, Nauka, 1964. 82 p.  
(MIRA 18:1)

PHASE I BOOK EXPLOITATION

SOV/5424

Tsiolkovskiy, Konstantin Eduardovich

Put' k zvezdam; sbornik nauchno-fantasticheskikh proizvedeniy (Journey to the Stars; Science Fiction Collection) Moscow, Izd-vo AN SSSR, 1960. 351 p. 50,000 copies printed.

Ed.-Comp.: B. N. Vorob' yev; Ed. of Publishing House: V. A. Boyarskiy; Tech. Ed.: T. P. Polenova.

PURPOSE: This science fiction collection is intended for the general reader.

COVERAGE: The book is a complete collection of the science fiction writings of K. E. Tsiolkovskiy. In these accounts many problems connected with the investigation and conquest of space are presented. Cosmic rocket travel and original apparatus to guarantee the survival of men, animals, and plants inside such rockets are described. Tsiolkovskiy speculates

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Journey to the Stars (Cont.)

SOV/5424

on the effect of the gravity of celestial bodies on the size of any possible inhabitants, etc. He sketches the vastness of space and trips to the planets of the solar system. In the preface of the book Academician V. G. Fesenko provides a critique of Tsiolkovskiy's science fiction writings, reviewing his ideas and pointing out some errors. A still more detailed appreciation and history of Tsiolkovskiy's science fiction is given in the summary by B. N. Vorob'yev. The book is concluded by three appendixes and a number of reproductions of Tsiolkovskiy's sketches. No personalities are mentioned. There are no references.

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Fesenko, V. G. On This Collection of K. E. Tsiolkovskiy's Science Fiction Writings	3
On the Moon	7
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TSIOLKOVSKIY, A.A., assistant

Theoretical fundamentals for the construction of parallel  
train sheets. Trudy DIIT no.28:94-111 '59. (MIRA 13:2)  
(Railroads--Traffic)



ACC NR: AP6036172

SOURCE CODE: UR/0209/66/000/011/0048/0054

AUTHOR: Korolev, S. P.; Tsiolkovskom. K. E.

ORG: none

TITLE: Ahead of his century [S. P. Korolev discusses K. E. Tsiolkovskiy]

SOURCE: Aviatsiya i kosmonavtika, no. 11, 1966, 48-54

TOPIC TAGS: space program, space <sup>research, astronautic personnel</sup> ~~station, space flight/K. E. Tsiolkovskiy~~

ABSTRACT: This is a discussion by the late Chief Spacecraft Designer S. P. Korolev on the 100th anniversary of the birth of rocket pioneer K. E. Tsiolkovskiy at a meeting of the Academy of Sciences, USSR, held on this occasion. Korolev recounts and evaluates Tsiolkovskiy's numerous contributions to space research and development, emphasizing the fact that not only basic research but numerous practical solutions offered by this scientist have found application in modern astronautics.

SUB CODE: 22, 05/ SUBM DATE: none

Card 1/1

TSIOMA, A.A., dotsent (Odessa, ul. R. Lyuksemburg, d.23, kv.21);  
CHANG, A.I.

Changes in the epiphysical cartilage following the  
introduction of metal nails; experimental studies. Ort.  
travm. i protez. 23 no.10:23-27 O '62.

(MIRA 17:10)

1. Iz kafedry khirurgii detskogo vozrasta i detskoy ortopedii  
(zav.- prof. M.L. Dmitriyev) Odesskogo meditsinskogo instituta  
imeni Pirogova (rektor - zasluzhennyy deyatel' nauki prof.  
I.Ya. Deyneka).

DANILENKO, V. (g.Khabarovsk); TSIOMA, G.; ZALUTSKIY, G.; BAKLANOV, S., starshiy instruktor-letchik; KUZ'MIN, N.; KORENYAKO, A.

Facts, events, people. Kryl.rod. 12 no.8:14-15 Ag '61.

(MIRA 14:8)

1. Nachal'nik aerokluba, g. Sverdlovsk (for TSioma). 2. Sar-tovskiy obkoma Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu (for Baklanov). 3. Zamestitel' predsedatelya respublikanskogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu, g. Minsk (for Korenyako).

(Aeronautics)

TSIOMENKO, I.A. (gorod Taldy-Kurgan).

Improvements on linotype. Poligr. proiz. no.5:13 My '53.

(MLBA 6:6)  
(Linotype)

VISHNEVSKIY, Ye. (g.Severo-Zadonsk, Tul'skoy obl.); TSIOMENKO, V.  
(g.Severo-Zadonsk, Tul'skoy obl.)

They take an interest in everything. Sov.shakht. 10 no.12:26  
D '61. (MIRA 14:12)  
(Communist Youth League)

FETISOVA, T.V.; KHOMITSKAYA, L.F. [Khomyts'ka, L.F.]; TSIOMIK, V.A.  
[TSionyk, V.O.]

Effect of ischemia on various indices of energy and protein  
metabolism of the myocardium. Ukr. biokhim. zhur. 36 no.1:  
80-87 '64. (MIRA 17:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut klinicheskoy  
meditsiny im. akad. N.D. Strazhesko.

TSIOMIK, V. A.

Cand Med Sci - (diss) "Effect of the complete preparation of vitamins C and P (galascorbin) on the carbohydrate-phosphorus metabolism in muscles of domestic rabbits when bruised."  
Stalino, 1961. 15 pp; (Ministry of Public Health Ukrainian SSR, Stalinskiy State Med Inst imeni A. M. Gor'kiy); 220 copies; price not given; (KL, 6-61 sup, 241)

TSIOMIK, V.A.

Effect of galascorbin on the regeneration of injured muscles.  
Vrach.delo no.2:131-134 F '59. (MIRA 12:6)

1. Kafedra biokhimii (zav. - prof.Ye.F.Shamray) Kiyevskogo  
meditsinskogo instituta.  
(ASCORBIC ACID) (MUSCLES--WOUNDS AND INJURIES)



TSIOMIK, V.A. [TSiomyk, V.A.]

Effect of galascorbine on the amount of glycogen, adenosinetriphosphoric acid, creatine phosphate, inorganic phosphate, and phosphorylase activity in traumatized muscles. Ukr.biokhim.zhur. 31 no.5: 709-716 '59. (MIRA 13:4)

1. Department of Biochemistry of the Kiev Medical Institute.  
(ASCORBIC ACID) (VITAMINS—P) (REGENERATION (BIOLOGY))

FETISOVA, T.V. [Fetysova, T.V.]; KHOMITSKAYA, L.F. [Khomits'ka, L.F.];  
TSIOMIK, V.A.

Reactive changes in the metabolism of infarction and peri-  
infarction portions of the heart in dogs. Fiziol. zhur. [Ukr.]  
10 no.1:61-67 '64. (MIRA 17:8)

1. Otdel biokhimii Ukrainskogo instituta klinicheskoy medi-  
tsiny im. akademika Strazheskogo, Kiyev.

SHAMRAY, Ye.I. [Shamarai, Ie.F.], FETISOVA, T.V., VEREMIYENKO, K.N.  
[Veremilenko, K.M.], KHMELEVSKIY, Yu.V. [Khmelevs'kyi, Iu.V.]  
TSIOMIK, V.A. [TSionyk, V.O.]

Comparative physiological activity of some polyphenols.  
Ukr.biokhim.zhur. 30 no.5:747-754 '58 (MIRA 11:12)

1. Kafedra biokhimii Kiyevskogo meditsinskogo instituta.  
(PHENOLS---PHYSIOLOGICAL EFFECT)  
(ASCORBIC ACID)

TSIOMO, N.A., dotsent

Seventh Congress of Theraputists of the Ukrainian S.S.R. Zdrav.  
Kazakh. 18 no. 2:64-68 '58. (MIRA 13:8)

(UKRAINE--THERAPEUTICS--CONGRESSES)

TSIOMO, N.A.; PREVELIS, V.K.

Use of acupuncture in hypertension. Zdrav. Kazakh. 21 no.5:42-44  
'61. (MIRA 15:2)

1. Iz kafedry terapii (zav. - dotsent N.A.TSiomo) fakul'teta  
usovershenstvovaniya vrachey Kazakhskogo meditsinskogo instituta.  
(ACUPUNCTURE) (HYPERTENSION)

TSIOMO, N.A., data.

Results of the work of the therapeutics section. Zdrav. Kazakh.  
17 no. 4/5 '57. (MIRA 12:6)

(MEDICINE, INTERNAL)

TSIOMO, N.A.

Use of nasal reflex therapy in gastric and duodenal ulcer.  
Zdrav.Kazakh. 17 no.8:33-35 '57. (MIRA 12:6)

1. Iz kafedry terapii fakul'teta usovershenstvovaniya vrachey  
Kazakhskogo gosudarstvennogo meditsinskogo instituta im. V.M.  
Molotova.

(PEPTIC ULCER)

(ELECTROTHERAPEUTICS)

TSION, A., dots.

New method of drying intestines. Mias.ind.SSSR 31 no.1:21 '60.  
(Sausage casings) (MIRA 13:5)



TSION, A.A., dotsent

Presnet state of the problem of poultry leucoses. Veterinariia  
37 no.12:43-47 D '60. (MIRA 15:4)  
(Leucosis) (Poultry--Diseases and pests)

TSION, A. A. Assistant Professor.

Modern conception of avian leukosis, Veterinariya, Vol. 37, No. 12, p. 43, 1960.

*Tsion, A.A.*

USSR/Microbiology - Antibiosis and Symbiosis. Antibiosis.

Abs Jour : *Rev Zhur - Zh. 5, 1956, 1959*

Author : *Reshetinskaya, T.V., Tsion, A.A., Samkov, M.I.*

Inst. : -

Title : *Activity of Spice Phytoecides on Mold Fungi.*

Orig Pub : *Sb. nauchn. tr. Ivanovsk. s.-kh. In-ta, 1956, No 13, 16-27*

Abstract : *Tarragon pepper, cinnamon, cloves and mustard possess fungicidal and fungistatic action in relation to Penicillium citrinum, Mucor racemosus, Trichoderma lignorum, and Cladosporium herbarum. Red and black pepper do not have these properties. In their action phytoecides of these spices delay germination of spores and spore-bearing. The fungicidal and fungistatic action increases with increased exposure.*

Card 1/1

TSION, A. A.

Lecturer, Ivanovo Agricultural Institute.

"On the problem of the preservation of lambs under the conditions of migrating (driving) animal husbandry."

SO: HYGIENE OF AGRICULTURAL ANIMALS, Proceedings of the XXIX Plenum of the Veterinary Section of the Academy,\* P. 152, Moscow 1950, Trans. 191, by L. Lulich. uncl

\* All-Union Acad. Agric. Sci. imeni I. V. Lenin

IVANOV, B.I.; CHERNYSHEVA, K.B.; TSION, L.R.; MARSHUYEVA, A.V.

Methods of purification of waste waters from the production of  
foamed polystyrene and styrene copolymer with acrylonitrile.

Trudy VNIIT no.10:217-227 '61.

(MIRA 15:3)

(Styrene compound polymers)(Acrylonitrile)  
(Sewage—Purification)

TSI N, R. A. (Professor, Kara andinsk sovkhov.) Enterocolites of the young of animals.

So: Veterinariya; 22; (1): January 1945; Uncl.  
TABCON

TSION, R. A.

TSION, R. A. (professor, Doctor of Veterinary Sciences,) and AKHMETOVA, F. A.  
(Veterinarian, Uzbek Scientific Research Veterinary Experimental Station.) The  
etiology of 'siuliuk'.

So: Veterinariya; 23; (10-11); October/November 1946; Uncl.  
TABCON

TSION, Robert Adol'fovich, prof.; GOL'DSHTEYN, S.A., red.; CHUNAYEVA,  
Z.V., tekhn.red.

[Infectious diseases of swine] Infektsionnye bolezni svinei.  
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 139 p.

(MIRA 13:5)

(Swine--Diseases)



TSION, E. A. and RAYMOND, A. A.

"Influenza in Cattle -- A Disease Simulating Foot-and-Mouth Disease". Veterinariya,  
1947 No 2.

10100, P. 8.

"Opredelitel' mikrobov (Determinative Schedule of Bacteria;, Sel'khozgiz, Moscow, 1948

USSR/Medicine - Animals - Diseases  
Medicine - Veterinary Medicine

Jan 1948

"Infectious Diseases in the Young of Farm Animals,"  
Prof R. A. Tsion, Dr Vet Sci, 3 pp

"Veter" No 1

Short summary of work done for last 30 years. Deals  
in particular with advances made concerning various  
typhus diseases of the young.

61T63

TSION, R. A.

"Manual for Identification of Microbes"

Reviewed by B. Ya. El'bert and A. B. Chernomordek

in  
Sov. Kniga, March 1949, pp 42-45  
Rpt. U-4626

m

TSION, PROF R. A.

1A 11015

USSR/Medicine - Cattle, Diseases  
Paratyphoid

Nov 49.

"Some Investigations on the Control of Paratyphoid  
in Calves," Prof R. A. Tsion, Dr Vet Sci, 5 pp

"Veterinariya" No 11

Discusses measures for paratyphoid control, including early and accurate diagnosis of disease and segregation of infected animals from healthy ones. Describes results of tests with vaccine and serum prophylaxis. Obtained good results by inoculating newborn calves with vaccine, 0.25 ml within 24 hr of birth, 0.5 ml after 3 days, and 0.75 ml 3 days after second injection.

159748

TSION, R. A., Prof., Dr. Vet. Sci.  
All-Union Sci.-Res. Inst. of Poultry Ind.  
"Polyavitaminosis of chicks."

SO: Veterinariya 26(11), 1949, p. 41.

also 1949 Letopis' Zhurnal'nykh Statey, No. 45, item 33,393 (without organization  
and field identification)

TSION, R.A.

[Pathogenic microbes and viruses] Bolesnetvornye mikroby i virusy. Moskva, Gos. izd-vo selkhoz. lit-ry, 1951. 76 p. (MLRA 7:8)  
(Microorganisms, Pathogenic) (Viruses)

TSION, R. A.

Contagious diseases of calves.

Moskva, Gcs. izd-vo selkhoz. litry 1952.

92 p. (Biblioteka kolkhoznika)



USSR/Medicine, Veterinary - Brucellosis Nov 52

"Results of Preparation and Administration of  
Therapeutic Serum in Treatment of Brucellosis,"  
Dr of Veter Sci R. A. Tsion, Cand Biol Sci I. A.  
Karkadinskaya, Leningrad Sci-Exptl Veter Inst

"Dok V-S Sel'khoz Nauk" Vol 18, No 11, pp 39-42

Serum was prepd by the method of hyperimmuniza-  
tion of cattle with antigens. Prepn is described  
in the text. The serum obtained by treating  
cattle did not agglutinate brucellosis bacteria,  
but it had pronounced pptg properties. Although

239T38

administration of this serum proved harmless and  
was successfully practiced, there are certain  
disadvantages to its use: after it has been ad-  
ministered prophylactically to cows with a neg  
agglutination reaction, no immunity was created  
in most cases. Submitted by Acad S. N. Muromtsev

239T38

TSION, R. A.

**TSION, R.A., professor; KHLUSTSOV, K.A., professor; CHERKASSKIY, Ye.S., professor.**

New edition of the textbook "Specialized epizootiology". Reviewed  
by R.A.TSion, K.A.Khlustsev, E.S.Cherkasskii. Veterinariia 32  
no.12:76-81 D '55. (MLRA 9:4)  
(COMMUNICABLE DISEASES IN ANIMALS)

TSION, R.A., doktor veterinarnykh nauk, professor.

Raising young pigs and protecting them against diseases. Veterinariia  
33 no.7:70-74 J1 '56. (MIRA 9:9)

1. Leningradskiy veterinarnyy institut.  
(Swine--Diseases and pests)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757110012-6"

USSR / Microbiology. Microorganisms Pathogenic to Humans  
and Animals. F-3

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 33818

Author : Tsion, R.A.

Inst : Not given

Title : Rationalization of Methods and Reduction of the Time in  
Laboratory Diagnosis of Infectious Diseases in Farm Animals.

Orig Pub : Sb. rabot. Leningr. vet. in-t, 1957, No 16, 66-70.

Abstract : No abstract.

SHOCHERBATYKH, P.Ya., prof.; TSION, R.A., prof.; PROTASOV, A.I., dots.;  
URBAN, V.P., kand.vet.nauk.; ~~URBANO~~UMOV, V.L., kand.vet.nauk;  
SIDORENKO, B.V.

Production and use of gamma globulin in treating swine for plague.  
Veterinariia 34 no.12:64 D '57. (MIRA 11:1)  
(Swine plague) (Gamma globulin)

TSION, R.A.

[Diseases of young farm animals] Bolezni molodniaka sel'sko-khoziaistvennykh zhivotnykh. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 143 p. (MIRA 11:6)  
(Veterinary medicine)

TSION, R.A., prof.

Concerning the book "Swine diseases" edited by K.I.Skriabin,  
A.M.Dobrokhotoy. Reviewed by R.A.TSion. Veterinariia 36 no.6:  
81-85 Je '59. (MIRA 12:10)

(Swine--Diseases)  
(Skriabin, K.I.) (Dobrokhotoy, A.M.)

SHCHERBATYKH, P.Ya.,prof.; TSION, R.A.,prof.; PROTASOV, A.I.,dots.; URBAN, V.P.,  
dots.; SIDORENKO, B.V.,kand.vet.nauk

Treating swine plague with specific gamma globulin. Veterinariia  
36 no.1:36-40 Ja '77. (MIRA 12:1)  
(Swine plagu ) (Gamma globulin)

PROTASOV, A.I., dotsent; SINEV, A.V., prof.; SMIRNOV, A.M., dotsent;  
 BAZHENOV, A.N., dotsent; VIL'NER, A.M., prof.; BASHMURIN, A.F.,  
 dotsent; SHAKALOV, K.I., prof.; VELLER, A.A., prof.; NIKANOROV,  
 V.A., prof.; FEDOTOV, V.P., dotsent; KUZNETSOV, G.S., prof.;  
 BOCHAROV, I.A., prof.; SHCHERBATYKH, P.Ya., prof.; TSION, R.A.,  
 prof.; GRIBANOVSKAYA, Ye.Ya., dotsent; ADAMANIS, V.F., assistant;  
 KOLABSKIY, N.A., dotsent; MITSKEVICH, V.Yu., dotsent; GUSEVA, N.V.,  
 dotsent; MYSHKIN, P.P., dotsent; GUBAREVICH, Ya.G., prof.;  
 FEDOTOV, B.N., prof.; DOBIN, M.A., dotsent; SIROTKIN, V.A., prof.  
 [deceased]; KUZ'MIN, V.V., prof.; YEVDOKIMOV, P.D., prof.; POLYAKOV,  
 A.A., prof.; POLYAKOV, P.Ya., red.; BARANOVA, L.G., tekhn.red.

[Concise handbook for the veterinarian] Kratkii spravochnik veteri-  
 narnogo vracha. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 624 p.  
 (MIRA 13:12)

(Veterinary medicine)



SHCHERBATYKH, P.Ya., prof.; TSIGN, R.A., prof.; PROTASOV, A.I., dotsent;  
GRIBANOVSKAYA, Ye.A., dotsent; KOROBKO, I.R., veterinarnyy vrach

Use of specific globulins against paratyphoid fever in young pigs.  
Veterinariia 41 no.5:50-52 My '64. (MIRA 18:3)

1. Leningradskiy veterinarnyy institut.

TSION, Robert Adol'fovich; PANOVA, Lidiya Grigor'yevna; POLYAKOV,  
F.Ya., red.

[Sheep diseases] Bolezni ovets. 2., perer. i dop. 1sd. Le-  
ningrad, Kolos, 1964. 96 p. (MIRA 18:3)

LIKHACHEV, N.V.; SYURIN, V.N.; TSION, R.A.; SHCHERBATYKH, P.Ya.;  
ZOTOV, A.P.; SKOMOROKHOV, A.L.; PIROG, P.P.; PINUS, A.A.;  
BAZYLEV, P.M.; NAZAROV, V.P.; ORLOV, F.M., dots.;  
USACHEVA, I.G., red.; YARNYKH, A.M., red.; BALLOD, A.I.,  
tekhn. red.; PROKOF'YEVA, L.N., tekhn. red.

[Virus diseases of animals] Virusnye bolezni zhivotnykh.  
Moskva, Sel'khozizdat, 1963. 564 p. (MIRA 17:1)

SYURIN, V.N., prof.; ZAGAYEVSKIY, I.S., prof.; TSION, R.A., doktor veterin.nauk;  
KALUGIN, V.I., kand.veterin.nauk; ZATSEV, N.V., kand.veterin.nauk;  
BORISOV, Ye.M., kand.veterin.nauk

Book reviews and bibliography. Veterinariia 40 no.7:79-86 J1  
'63. (MIRA 16:8)

(Veterinary medicine)

SHCHERBATYKH, P.Ya., prof.; TSION, R.A., prof.; PROTASOV, A.I., dotsent;  
GRIBANOVSKAYA, Ye.Ya., dotsent; KOROBEKO, I.R., veterinarnyy vrach

Use of globulin in swine plague. Veterinariia 39 no.10:33-35  
O '62. (MIRA 16:6)

1. Leningradskiy veterinarnyy institut.  
(Globulin) (Swine plague)

TSION, Robert Adol'fovich, doktor veter. nauk, prof.; L'VOV,  
Valeriy Mikhaylovich, kand. veter. nauk, dots.;  
GOL'DSHTEYN, S.A., red.; BARANOVA, L.G., tekhn. red.

[Diseases of young farm animals] Bolezni molodniaka sel'sko-  
khoziaistvennykh zhivotnykh. Moskva, Sel'khozizdat, 1963.  
294 p. (MIRA 16:8)

(Veterinary medicine)

TSION, R.A., prof., doktor veterin.nauk; URBAN, V.P., dotsent, kand.  
veterin.nauk

Etiology of infectious atrophic rhinitis in swine. Veterinariia  
37 no.7:31-33 J1 '60. (MIRA 16:2)

1. Leningradskiy veterinarnyy institut.  
(Swine—Diseases and pests) (Nose—Diseases)

TSION, R. A. AND URBAN, V. P.

"Aetiology of infectious atrophic rhinitis in pigs."

Veterinariya, Vol. 37, No. 7, 1960, p. 31

*Tsion - Prof. Dr. Vet. Sci., Penzance Vet. Inst.*



KUZNETSOV, G.S., prof., otv. red.; BOCHAROV, I.A., prof., red.; VOKKEN, G.G., prof., red.; TSION, R.A., prof., red.; DMITROCHENKO, A.P., prof., red.; SINEV, A.V., prof., red.; FEDOTOV, E.N., prof., red.; CHERNYAK, V.Z., prof., red. Primali uchastiye: NIKOL'SKIY, S.N., prof., red.; KHEY SIN, Ye.M., prof., red.; GUSEV, V.F., dots., red.; KOLABSKIY, N.A., dots., red.

[Papers presented at the Conference on Protozoological Problems Dedicated to the 90th Anniversary of the Birth of Professor V.L. IAKimov] Sbornik rabot Nauchnoi konferentsii po protozoologicheskim problemam, posviashchennaia 90-letiiu so dnia rozhdeniia professora V.L.IAKimova. Leningrad, 1961. 292 p. (MIRA 15:6)

1. Nauchnaya konferentsiya po protozoologicheskim problemam, posvyashchennaya 90-letiyu so dnya rozhdeniya professora V.L. Yakimova.
  2. Stavropol'skiy sel'skokhozyaystvennyy institut (for Nikol'skiy).
  3. Institut tsitologii Akademii nauk SSSR (for Kheysin). 4. Leningradskiy veterinarnyy institut (for Kolabskiy).
- (Protozoology--Congresses)

POFOV, A.N., kand. tekhn. nauk; KOROBov, Ye.P.; TSIONKOVSKIY, A.L.;  
PERFILOV, I.F., inzh., red.

[Preparing reinforced concrete pressure pipes by the vibration-pressing method; practices of the Kuybyshev Pipe Plant No.7 of the "Zhelezobeton" Trust] Izgotovlenie zhelezobetonnykh napornykh trub metodom vibropressovaniia; opyt Kuibyshevskogo trubnogo zavoda No.7 tresta "Zhelezobeton." Moskva, Gosstroizdat. 1963. 53 p.

(MIRA 17:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Rukovoditel' laboratorii zhelezobetonnykh trub Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR. (for Popov). 3. Glavnyy inzhener tresta "Zhelezobeton" (for Korobov). 4. Glavnyy inzhener laboratorii zhelezobetonnykh trub Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for TSionkovskiy).

A rapid method for the determination of titanium. M. S. Novakozskii and D. B. Tskumakaya. *Zhurnal Khim. Fiz.* 9, No. 1, 103-4 (1940).—A method for detg. Ti in the presence of Fe by titrating with  $K_2Cr_2O_7$  or  $FeCl_3$  in the presence of 0.5% aq. indigo carmine soln. is proposed. The method is very rapid and accurate and is recommended for plant analyses for the detn. of Ti in ferrotitanium. The detn. of Ti requires not more than 5 min. (excluding the time necessary for dissolving the sample). After dissolving the sample transfer the soln. to a measuring flask and dil. to 200 ml. with 2%  $H_2SO_4$ . Mix 20 ml. of the soln. (contg. 0.1 g. of the sample) with Zn amalgam, shake for 3 min., pass  $CO_2$  through the soln., add 2-3 drops of the indigo carmine indicator and titrate with  $K_2Cr_2O_7$  or  $FeCl_3$  until a blue-green color is obtained. Fe can also be reduced with Bi amalgam in the presence of Ti. In 0.5 N HCl the Bi amalgam reduces only Fe. W. R. Hrenn

W. R. Henn

ANDREYEV, B.M.; TSIONSKIY, V.M.

H - D isotopic equilibrium in the system consisting of gaseous hydrogen and its solution in palladium. Zhur. fiz. khim. 38 no.3. 751-752 Mr '64. (MIRA 17:7)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleyeva.

ACC NR: AP6029717

SOURCE CODE: UR/0089/66/020/001/0084/0085

AUTHOR: Yakimenko, L. M.; Kuznets, E. D.; Tsionskiy, V. M.

ORG: none

TITLE: Tritium content in atmospheric fall-out over Moscow during 1962-1963

SOURCE: Atomnaya energiya, v. 20, no. 1, 1966, 84-85

TOPIC TAGS: tritium, radioactive fallout, fission product, atmospheric precipitation, radioactivity measurement

ABSTRACT: Natural tritium is oxidized and usually found on the ground as the radioactive component of rainwater, amounting to several T units (1 T unit is defined as 1 tritium atom per  $10^{18}$  hydrogen atoms). As the result of the atmospheric thermonuclear tests, the T level increased by 2 orders of magnitude and at times it reached several thousands of T units. The factors that affect the T level of rainwater include the distance of the point from the site of the explosion, the distance from large oceanic masses, geographic location, and meteorological conditions. Fission products may reside long periods in the upper layers of the atmosphere. The T level of precipitations collected in Moscow was systematically determined, starting in December 1961. The samples were first enriched by a three-stage electrolytic process, the deuterium content determined by the drop method, and the tritium determined by its activity in hydrogen, obtained by decomposing the water in vacuum over Mg amalgam. The reproducibility of the method was ascertained by analyzing the same tap water samples repeatedly. The error of the measurements was  $\pm 10\%$  and its sensitivity was  $20 \pm 10$  T units. The tritium content of collected snow and rainwater samples increased from 523 in December 1961 to 5890 in July 1963, reaching values between 618 and 1125 T units in December 1963. Orig. art. 683: 1 figure and 1 table. [NA]

SUB CODE: 18 / SUBM DATE: 27 May 65 / OTH REF: 006

UDC: 551.577.7

Card 1/1

*TSIOPA, A.D.*

SLIOZBERG, S.K., kand.tekhn.nauk; TSIOPA, A.D., inzh.

Fusion butt welding of copper and aluminum. Svar.proizv, no.12:  
31-32 D '57. (MIRA 11:1)

1.Vsesoyuznyy nauchno-issledovatel'skiy elektrosvarochnogo oboru-  
dovaniya.

(Copper--Welding) (Aluminum--Welding)

*Tsiorn, A. D.*

135-12-10/17

AUTHOR: Sliozberg, S.K., Candidate of Technical Sciences and Tsiopa, A.D.,  
Engineer

TITLE: Flash Butt Welding of Copper to Aluminum (Stykovaya svarka  
oplavleniyem medi s alyuminiyem)

PERIODICAL: Svarochnoye Proizvodstvo, 1957, # 12, p 31-32 (USSR)

ABSTRACT: Contact welding of copper to aluminum is difficult (on account  
of high heat conductivity, low electric resistance, different  
melting points, formation of heat resistant  $Al_2O_3$  films and  
brittle layers). Therefore, VNIIESO investigated the flash weld-  
ing method on bars and pipes of 10 to 30 mm diameter of pure  
copper "M 1" and pure aluminum "АД-1" and developed the welder  
"MCKH-150" shown in a photograph (Figure 1), with a drive en-  
abling a higher than usual speed of fusion and upsetting. The  
welder has electronic control with an ignitron contactor per-  
mitting precisely measured application of electric current. The  
pneumo-hydraulic upsetting drive of the welder is shown by Figure  
2. The optimum parameters of the welding process are given.  
Properly welded specimens broke in tests in the aluminum part  
at a distance from the joint. A microphotograph shows a joint

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Flash Butt Welding of Copper to Aluminum

135-12-10/17

welded with deviation from the optimum welding parameters, with distinct areas of aluminum and copper alloys the hardness of which reaches 800-850 kg/mm<sup>2</sup>. The work of the welder "MCKH-150" is described. There are 3 photographs and 1 drawing.

ASSOCIATION: VNIIESO

AVAILABLE: Library of Congress

Card 2/2



TSIOPKALO, A. I.

Tsiopkalo, A. I. - "The calculation of a closed, curved beam lying on a flexible base and rigid supports, with a nonsymmetrical load", Trudy Novocherkas. politekhn. in-ta im. Ordzhonikidze, Vol. XXI, 1949, p. 107-18.

SO: U-4631, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 24, 1949).

SOROKIN, A.F.; TSIPEROVICH, M.V.

Flotation characteristics of some carbocyclic compounds. Koks i  
khim. no.2:5-8 '64. (MIRA 17:4)

1. Vostochnyy uglekhimicheskiy institut.

15

10

The control of cockchafer by means of tree dusting.  
V. L. Tolopkalo. *Plant Protection* (U. S. S. R.) 1936.  
No. 9, 92-110 (Rus English 109-10).—The dusting of oak  
foliage with Ca arsenite, Paris green or Na fluosilicate  
causes almost 100% mortality of *M. hippocastani* F.  
males when dusted in quantities of 7-8 kg./hectare. Fe-  
males show an 80% mortality rate with 20-30 kg./hectare  
of Ca arsenite contg. 70%  $As_2O_3$ . Analysis of the dead  
beetles showed an av. of 0.0032-0.0130 mg. of  $As_2O_3$ ,  
the amt. in males being 0.0020-0.0080 mg., and in females  
0.0073-0.0237 mg. Females feeding on poisoned leaves  
and remaining alive had 0.0063-0.0155 mg. As. The  
eggs of these females developed normally. The eggs  
reached maturity 10-15 days after the beetles appeared.  
The dusting of the trees must be begun at the moment of  
appearance of the females, which occurs some 6-7 days  
after the flight of the first males. S. A. Karjala

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Control measures against the Spanish fly (*Lyta vesicatoria* L.). V. L. Tsipkalo. *Plant Protection* (U.S.S.R.), 1970, No. 10, 157-158. The mortality of the beetles was determined by the formula  $M = \frac{A}{B} \times 100$ , where  $M$  is the percentage of the dead insects in the control,  $A$  the total no. of insects used and  $B$  the no. of dead insects. The av. duration of life after treatment with insecticide was 1.2 days for the strong insecticides and 4.5 days for the weak insecticides. Dusting of the beetles produced the following results for mortality and duration of life for the male and female *Lyta vesicatoria* L., resp.: ground leaves of camomile 20%, 3.1 days and 5.5%, 4.0 days for 100-mg. doses contg. 0.5% of pyrethrin I, none, and 2.0 days for 300-mg. doses contg. 0.5% of pyrethrin I, takenum said. with camomile ext. 100%, 2.6 days and 41.6%, 3.9 days for 100-mg. doses contg. 0.5% of pyrethrin I; 100%, 2.3 days and 21.4%, 5.0 days for 100-mg. doses contg. 3% of pyrethrin I (no toxic effect was obtained from 100-mg. doses contg. 1.2 and 0.6% of pyrethrin I); takenum said. with camomile ext. + 14% of  $\text{Ca}(\text{AsO}_4)_2$  none, and 0.1%, 2.3 days for 20-mg. doses (corresponding to 5.6 kg. per ha.) contg. 0.3% of pyrethrin I, takenum said. with camomile ext. 1.7% of  $\text{Ca}(\text{AsO}_4)_2$ , none, and 100%, 1.0 days for 40-mg. doses contg. 0.3% of pyrethrin I; Veridal 52.4%, 3.1 days and 14.0%, 4.3 days for 100-mg. doses; 60-mg. doses 100%, 1.0 day and 100%, 1.2 days; 20-mg. doses 100%, 1.0 day and 100%, 1.1 days; 10-mg. doses 100%, 1.1 days and 100%, 1.5 days; 5-mg. doses 100%, 1.5 days and 100%, 1.2 days; 2.5-mg. doses 92.2%, 2.1 days and 81.7%, 1.2 days; 1.25-mg. doses none, and 15.8%, 4.5 days; 100-mg. doses of  $\text{Ca}(\text{AsO}_4)_2$  25.2%, 4.0 days and 15.8%, 1.5 days; 60-mg. doses none, and 9.7%, 4.8 days. No toxic effect was obtained with 40-mg. doses of  $\text{Ca}(\text{AsO}_4)_2$ . Satisfactory results were obtained with  $\text{Na}_2\text{SiF}_6$  and  $\text{NaF}$ .  $\text{Na}_2\text{SiF}_6$  had a satisfactory toxic effect on males when used in large units (30-5 kg./hectare); it had very little effect on the females. W. R. Henn

The prospect of replacing enterotoxins by contact poisons in the combating of plant pests. V. L. Tsygalka, *Vestn. Akad. Nauk S. S. R.* 1938, No. 5, 69-75; *Chem. Zentr.* 1939, II, 706. Expts. are reported on the use of camomile exts. and especially of petr. ether exts. of *Chrysanthemum cuneifolium* L. for the control of plant pests. The chief active substances contained in the exts. are pyrethrin I and pyrethrin II. Pyrethrin I is much more effective than II. The injurious effect is limited to cold-blooded animals; no injury to warm-blooded animals could be detected. The chief effect is a contact action through the skin, which is especially severe in the case of smooth, hairless worms. When the ext. is used on tale, kieselguhr, and other carriers it is very effective in killing other pests of field and woods. M. G. Moore

M. G. Moore

ASME-SLA METALLURGICAL LITERATURE CLASSIFICATION

TSIOTOV, A.Ya., inzh.

Testing the bearing capacity of eccentrically compressed reinforced concrete wall panels. Nov.v stroi.tekh. no.13:116-135 '59.

(MIRA 13:4)

(Concrete slabs--Testing)

TSIOTOV, A.Ya., inzhener.

Nomenclature of reinforced concrete products for panel-built  
apartment houses. Nov.v stroi.tekh. no.4:70-94 '55. (MIRA 10:10)

1. Nauchno-issledovatel'skiy institut stroitel'noy tekhniki  
Akademii arkhitektury USSR.  
(Precast concrete) (Apartment houses)

S/263/62/000/011/014/022


I007/I207

AUTHOR: Tsiovkin, Yu. N. and Krentsis, R. P.

TITLE: Low-temperature adiabatic calorimeter

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 11, 1962, 41, abstract 32.11.320. "Tr. Ural'skogo politekhn. in-ta", sb no. 114, 1961, 75-80

TEXT: An installation is described consisting of a copper container immersed together with a heat exchanger in a Dewar vessel filled with a coolant. 18 vacuum-tight copper conductors pass through the heat exchanger where they are wound around an internal sleeve directly connected with the coolant; through an opening in the upper flange of the heat exchanger, the conductors are connected with a drum fastened to this flange. The drum is provided with a box filled with needles intended to simulate a thermodynamic black body. Both the screen system for preventing the heat exchange and the calorimeter representing a thin-walled closed copper cylinder are fastened to the drum by means of a plexiglass ring. The heating element is made of 0.07 mm gage constantan wire. The temperature within the calorimeter is measured by means of an electric-resistance platinum thermometer. The heating time is determined by means of an electromagnetic relay which, simultaneously with the connection of the heating element, delivers the signal from a quartz generator to the input of a measurement-conversion unit. An automatic potentiometric device permits the recording of a continuous "temperature versus time" curve. Measurement of specific heat at



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Low-temperature adiabatic calorimeter

S/263/62/000/011/014/022  
1007/1207

a given temperature takes one hour; the over-all error in determining the energy fed to the calorimeter heating element does not exceed 0.1%.

[Abstracter's note: Complete translation.]



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TSIOVKIN, Yu.N.; VOLKENSHTEYN, N.V.

Heat capacity of 0.5% solutions of Cr, Mn, Fe, Ni in platinum.  
Fiz. tver. tela 7 no.2:543-545 F '65.

1. Institut fiziki metallov AN SSSR, Sverdlovsk.

(MIRA 18:8)

TSIOVKIN, Yu.N.; VOLKENSHTEYN, N.V.

Electroconductivity of diluted solutions of transition metals  
in platinum. Zhur. eksp. i teor. fiz. 48 no.3:796-799 Mr '65.  
1. Institut fiziki metallov AN SSSR. (MIRA 18:6)